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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,294	08/16/2001	Rabindranath Dutta	AUS920010532	3674
7590	03/07/2006		EXAMINER JARRETT, SCOTT L	
Darcell Walker 8107 Carvel Lane Houston, TX 77036			ART UNIT 3623	PAPER NUMBER

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/931,294	DUTTA ET AL.	
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 12-18, 23-29, 31 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-18, 23-29, 31 and 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This **Final** Office Action is in response to Applicant's amendment filed December 23, 2005. Applicant's amendment amended claims 1-5, 12-18, 23-29, 31 and 33-40 and canceled claims 6-11, 19-22, 30 and 32. Currently claims 1-5, 12-18, 23-29, 31 and 33-40 are pending.

Response to Amendment

2. Applicant's amendment necessitated the new ground(s) of rejection.

The objection to the title is withdrawn in response to Applicant's amendments to the title.

The USC 101 rejection of claims 1-32 is withdrawn in response to Applicant's amendments to claims 1-32.

The USC 112(2) rejection of claims 2, 4, 6, 11, 13, 24, 27, 31 and 37 is withdrawn in response to applicant's amendments to claims 2, 4, 6, 11, 13, 24, 27, 31 and 37.

Response to Arguments

3. Applicant's arguments with respect to claims 1-5, 12-18, 23-29, 31 and 33-40 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that the applicant did not challenge the Official Notice(s) cited in the First Office Action therefore those statements as presented are herein after prior art. Specifically it has been established that it was old and well known in the art at the time of the invention:

- for suppliers/vendors to swap inventory (inventory swapping, when an originally ordered shipped product is delivered to the alternative supplier and becomes part of the alternate supplier's inventory; Specification: "Inventory swapping between suppliers of the same product are not unusual in many industries.", Page 10, Lines 16-18).

- to return an order (product, shipment) to the supplier (source) due to the inability of the original (initial) supplier (source) to meet its delivery commitments (e.g. guaranteed delivery);

- to determine that an order has reached its delivery destination (receipt/delivery confirmation) thereby enabling users to obtain proof of delivery (Specification: Page 1, Lines 22-32., "...to the customer whose signature must be obtained, returned and stored for proof of delivery.", Page 2, Lines 1-3); and

- to enable users to track/monitor the progress of their shipments (Specification: Page 1, Lines 22-32; Page 2, Lines 1-3).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 12, 23, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by CEMEX's Delivery Management System and Method as evidenced by at least the following:

- I. Meyer, Christopher, Role Models (1996), herein after reference A;
- II. Petziner, Thomas et al., The front lines (1996), herein after reference B; and
- III. Slywotzky, Andrew, Concrete Solution (2000), herein after reference C.

Regarding Claims 1, 23 and 27 CEMEX teaches an expert system and method for ensuring the delivery of a product (parcel, package, item, object, cement, etc.) to a delivery destination (site) within a predetermined time period (window, appointment, etc.; guaranteed delivery time), the system/method utilizing an alternate (backup, substitute, replacement, contingent, etc.) product supplier (source, entity, producer, truck, mixing plant, driver, etc.; reference A: "when the Cemex system receives changes in construction plans from a customer, the system can instantly identify orders of similar concrete formulas and reroute appropriate trucks to plug emerging gaps in order fulfillment. Also, the system can divert trucks to nearby plans and have their formulas modified, thus fulfilling orders with trucks originally intended for other

Art Unit: 3623

destinations", Paragraph 6, Page 3; Paragraphs 4-6, Page 3; reference B: Paragraph 3, Page 1; Paragraph 7, Page 2; reference C: Paragraphs 3-7, Page 1; Paragraph 7, Page 2) and comprising:

- receiving a delivery order from a customer, the delivery order containing product information, delivery location and time information (reference A: Paragraphs 1, 7, Page 3; reference B: Paragraphs 5-6, Page 1; Paragraph 1, Page 2; reference C: Paragraphs 3, 7, Page 1);
- processing the received delivery order (reference A: Paragraphs 1, 7, Page 3; reference B: Paragraphs 5-6, Page 1; Paragraph 9, Page 2; reference C: Paragraphs 3, 7, Page 1);
- generating a delivery route (schedule, itinerary, etc.) for the processed order (reference A: Paragraphs 4-6, Page 3; reference B: dispatcher, scheduler; Paragraph 3, Page 1);
- tracking the shipped order along a delivery route to assess the progress of the shipment to the delivery destination (reference A: Paragraph 4, Page 3; reference B: Paragraphs 6-7, 9, Page 2; 5% discount if delivery time period/window missed, Paragraphs 6-7, 9 and Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2);
- implementing an alternative delivery program (routine, method, steps, etc.), if the order tracking indicates that the shipped order will not reach the delivery destination within the predetermined delivery time as specified in the order (i.e. guaranteed delivery window) wherein the alternative delivery program further comprises (reference A:

Art Unit: 3623

Paragraphs 1, 4, 6, Page 3; reference C: Paragraph 1, Page 1; Paragraphs 4-6, Page 2; reference C: constant rerouting; Paragraph 3, Page 1):

- contacting an alternative product supplier (truck, plant, etc.; reference A: Paragraphs 4, 6, Page 3; reference C: Paragraphs 4-6, Page 2);

- providing the alternative product supplier with the order containing product information, delivery location and time information for shipping the product from the alternative product supplier to the delivery destination (reference A: Paragraphs 4, 6, Page 3; reference B: Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2); and

- generating an alternative delivery destination for the original customer order, the alternative destination being a destination of a received order from a second customer, the second customer order being substantially the same as the original/first order or the location from which the customer order originated (reference A: Paragraphs 4, 6, Page 3; reference B: Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

Regarding Claim 12 CEMEX teaches a system and method for tracking the delivery of a product to a designated destination within a predetermined delivery time, wherein the system/method utilizes an alternate product supplier and comprises:

- receiving a delivery order from a customer, the delivery order product, delivery location and delivery time information (reference A: Paragraphs 1, 7, Page 3; reference

Art Unit: 3623

B: Paragraphs 5-6, Page 1; Paragraph 1, Page 2; reference C: Paragraphs 3, 7, Page 1);

- supplying a product and product information to a shipping and handling entity (cement truck, mixing plant, dispatcher, scheduler; reference A: Paragraphs 4-6, Page 3 reference B: Paragraphs 6, 7, 9, Page 2; reference C: Paragraph 1, Page 1; Paragraphs 4-6, Page 2);

- determining a delivery route (schedule, itinerary, etc.) for the product the delivery route containing product handover points along the route of the product (e.g. cement plant to cement truck, cement truck to construction site, etc.; reference A: Paragraphs 4-6, Page 3; reference B: dispatcher, scheduler; Paragraph 3, Page 1);

- recording the transfer of the product order from the product supplier to the shipping and handling entity (reference A: Paragraphs 1, 7, Page 3; reference B: Paragraphs 5-6, Page 1; Paragraph 1, Page 2; reference C: Paragraphs 3, 7, Page 1);

- tracking the shipped order along a delivery route and assessing the shipments progress to the delivery destination based on elapsed time (reference A: Paragraph 4, Page 3; reference B: Paragraphs 6-7, 9, Page 2; 5% discount if delivery time period/window missed, Paragraphs 6-7, 9 and Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2);

- implementing an alternative delivery program (routine, method, steps, etc.), if the order tracking indicates that the shipped order will not reach the delivery destination within the predetermined delivery time as specified in the order (i.e. guaranteed delivery window) wherein the alternative delivery program further comprises (reference A:

Art Unit: 3623

Paragraphs 1, 4, 6, Page 3; reference C: Paragraph 1, Page 1; Paragraphs 4-6, Page 2; reference C: constant rerouting; Paragraph 3, Page 1):

- contacting an alternative product supplier (truck, plant, etc.; reference A:

Paragraphs 4, 6, Page 3; reference C: Paragraphs 4-6, Page 2);

- providing the alternative product supplier with the order containing product information, delivery location and time information for shipping the product from the alternative product supplier to the delivery destination (reference A: Paragraphs 4, 6, Page 3; reference B: Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2); and

- generating an alternative delivery destination for the original customer order, the alternative destination being a destination of a received order from a second customer, the second customer order being substantially the same as the original/first order or the location from which the customer order originated (reference A: Paragraphs 4, 6, Page 3; reference B: Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4, 12-16, 24-25, 27-29, 31 and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over CEMEX's Delivery Management System and Method as evidenced by at least the following:

- I. Meyer, Christopher, Role Models (1996), herein after reference A;
 - II. Petziner, Thomas et al., The front lines (1996), herein after reference B; and
 - III. Slywotzky, Andrew, Concrete Solution (2000), herein after reference C
- as applied to claims 1, 23 and 27 above and further in view of Aklepi et al., U.S.

Patent No. 6,795,823.

Regarding Claims 2 and 24 CEMEX teaches a method and system for ensuring the delivery of a product to a delivery destination wherein the delivery order-processing further comprises:

- recording information contained in the delivery order in a product delivery (central clearinghouse, back-office systems, centralized scheduling/dispatching; reference C: Paragraphs 4-6, Page 2);
- scheduling the received ordered with a product supplier (mixing plant, production facility, delivery truck, etc.; reference A: Paragraphs 1, 7, Page 3; reference

B: Paragraphs 5-6, Page 1; Paragraph 1, Page 2; reference C: Paragraphs 3, 7, Page 1); and

- selecting a shipping and handling entity to ship the product (reference A: Paragraphs 1, 7, Page 3; reference B: Paragraphs 5-6, Page 1; Paragraph 1, Page 2; reference C: Paragraphs 3, 7, Page 1).

While CEMEX teaches the utilization of well-known expert systems, artificial intelligence and complex computer systems, approaches and technologies CEMEX is silent on the specific architecture and/or subsystems utilized in the product delivery system and method. Specifically CEMEX does not expressly teach recording information contained in the delivery order in a product delivery database as claimed.

Aklepi et al. teach storing/recording information a plurality of delivery information in a database (including delivery order information), in an analogous art of product/materials delivery management, for the purposes of providing a convenient and/or efficient mechanism for storing and accessing a plurality of data via the Internet (Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102).

More generally Aklepi et al. teach "a system for routing an article through a process delivery network which permits repeated re-optimization of a delivery route based on continually updated conditions, complete control over the delivery date, time and location of the article...real-time or near-real-time tracking of individual articles by

Art Unit: 3623

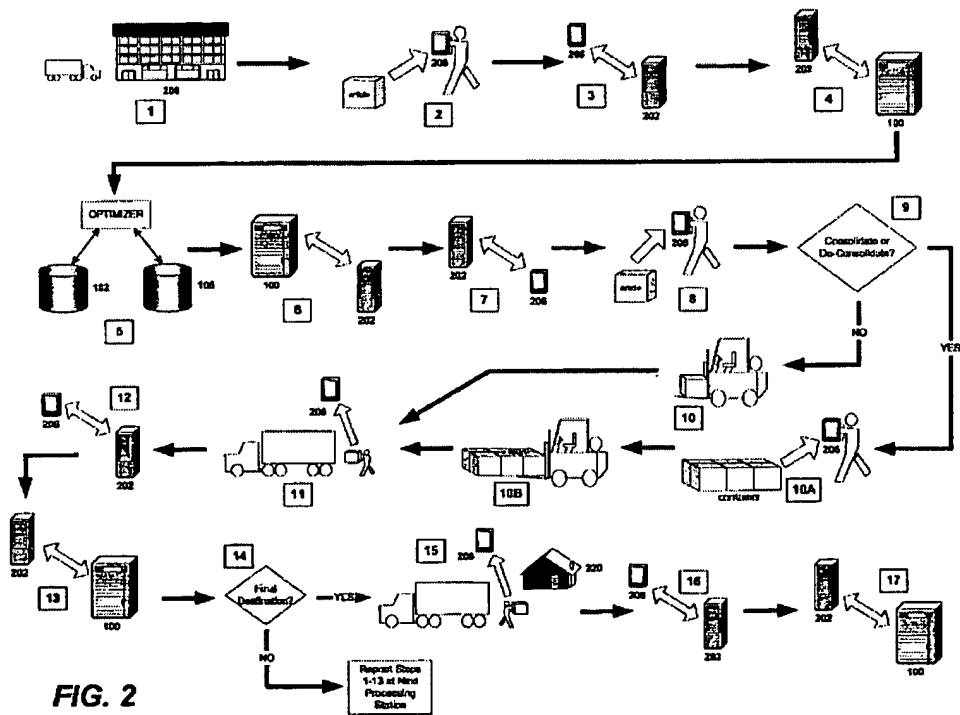
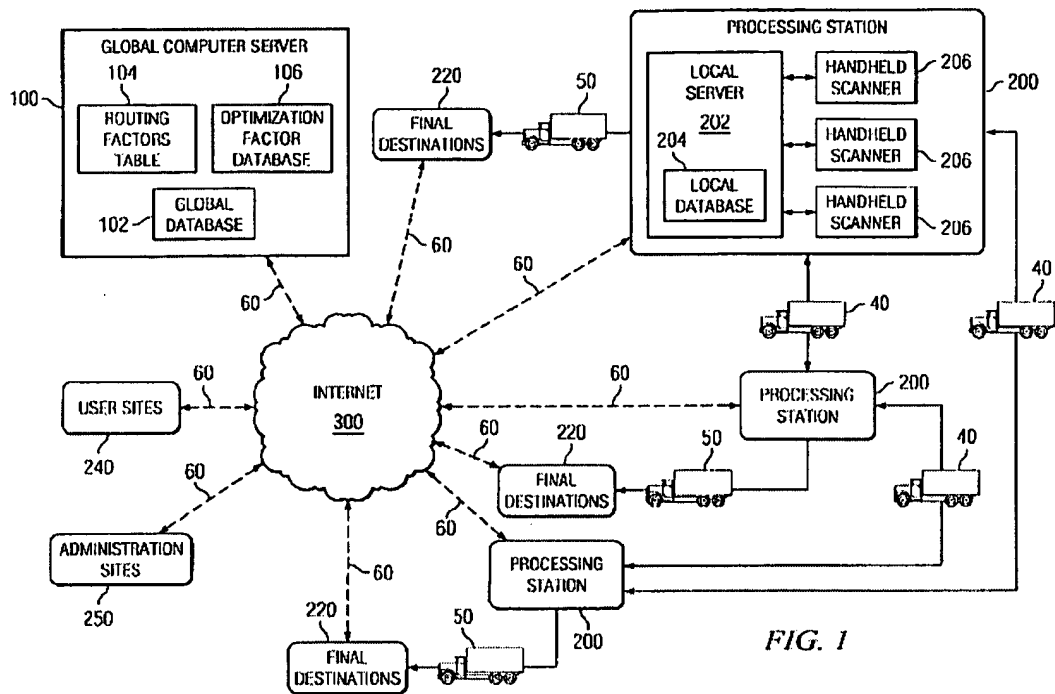
using a centralized database" (Column 4, Lines 7-13) and that the "system and method for tracking and routing articles which allows a user to identify articles while in transit or processing and manually change their routing, specify required stops, alter their final destination, and otherwise control the delivery of said articles prior to their arrival at their final destinations." (Column 3, Lines 38-42).

Aklepi et al. further teach that the method and system for ensuring the delivery of a product to a delivery destination further comprises:

- receiving a delivery order from a customer, the delivery order containing product information, delivery location and time information (Column 9, Lines 36-45);
- processing the received delivery order (Column 9, Lines 36-45);
- generating a delivery route (schedule, itinerary, etc.) for the processed order (Column 4, Lines 7-13, 51-68; Column 5, Lines 1-68);
- tracking the shipped order along a delivery route to assess the progress of the shipment to the delivery destination (Column 4, Lines 51-68; Column 9, Lines 1-23; Figures 1-2) wherein the delivery route comprises a plurality of physical checkpoints (stops, processing stations, switchover, handoff, handover, exchange, etc.; Column 4, Lines 15-21);
- continually optimizing the order's route as it passes through a plurality of shipping and handling entities and checkpoints (i.e. the route, estimated time of arrival, and delivery time are re-calculated at each checkpoint, exchange, intermediate processing station, etc.; Column 4, Lines 15-21, 51-68; Column 9, Lines 1-23; Column 10, Lines 20-34; Figures 1-2);

Art Unit: 3623

- dynamically re-routing orders including dynamically changing the final and/or intermediate destinations based on order tracking information (i.e. implementing an alternative delivery program; detecting lost/misdirected orders and taking corrective action; Column 6, Lines 1-36; Column 9, Lines 1-23; Column 10, Lines 24-33, 44-59);
- storing/recording a plurality of delivery information in one or more a databases (e.g. delivery order information; Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102);
- recording product/order/delivery (time, date, next destination, etc.) of the plurality of exchanges (handoffs, handovers, processing stations, checkpoints, etc.; Column 5, Lines 5-66; Column 7, Lines 55-68; Column 8, Lines 44-65);
- utilizing routing/optimization rules (policies, procedures, logic, etc.; Column 6, Lines 55-68; Figure 1, Element 106); and
- utilizes a distributed, N-tier system architecture (Column 7, Lines 9-34; Column 10, Lines 13-20, 60-68; Column 11, Lines 1-9; Figure 2) that includes a plurality of subsystems/servers/clients and a computer/communication network (Internet; Figure 1, Elements 60, 300).



It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to store/record a plurality of delivery information, as taught by CEMEX would have benefited from recording/storing delivery information in a database in view of the teachings of Aklepi et al.; the resultant system/method enabling users to efficiently and/or conveniently store and/or access the plurality of delivery information stored by the system/method via the Internet (Aklepi et al.: Column 10, Lines 13-43).

Regarding Claims 3 and 25 CEMEX teaches a method and system for ensuring the delivery of a product to a delivery destination further comprising determining a delivery route for the product, the delivery route containing checkpoints for tracking the product during delivery as discussed above.

While CEMEX teaches the real-time/near real-time tracking, monitoring and controlling of a plurality of product deliveries to a plurality of delivery destination CEMEX does not expressly determining a route for the product wherein the route contains *checkpoints* as claimed.

Aklepi et al. teach determining a delivery route for the product, the delivery route containing checkpoints for tracking the product during delivery (Column 4, Lines 15-21 and 51-68; Column 9, Lines 1-23; Column 10, Lines 20-34; Figures 1-2) in an analogous art of product delivery management for the purposes of continually

Art Unit: 3623

optimizing the delivery route (Abstract; Column 4, Lines 51-68; Column 9, Lines 1-23; Figures 1-2).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for ensuring the delivery of a product to a delivery destination within a predetermined delivery time period wherein the system/method utilizes alternative product suppliers and alternative order delivery destinations as taught by CEMEX would have benefited from determining a delivery route for the product, the delivery route containing checkpoints (stops, processing stations) for tracking the product during delivery (transit, processing) in view of the teachings of Aklepi et al.; the resultant system/method continually optimizing the product order delivery route (Aklepi et al.: Abstract; Column 4, Lines 51-68; Column 9, Lines 1-23; Figures 1-2).

Regarding Claim 4 CEMEX does not expressly determining a route for the product wherein the route contains physical and/or timing *checkpoints* as claimed.

Aklepi et al. teach determining a delivery route for the product wherein the delivery route contains physical checkpoints for tracking the product during delivery (Column 4, Lines 15-21 and 51-68; Column 9, Lines 1-23; Column 10, Lines 20-34; Figures 1-2) in an analogous art of product delivery management for the purposes of

Art Unit: 3623

continually optimizing the delivery route (Abstract; Column 4, Lines 51-68; Column 9, Lines 1-23; Figures 1-2).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for ensuring the delivery of a product to a delivery destination within a predetermined delivery time period wherein the system/method utilizes alternate product suppliers and alternate order delivery destinations as taught by CEMEX would have benefited from determining a delivery route for the product, the delivery route containing physical checkpoints (stops, processing stations) for tracking the product during delivery (transit, processing) in view of the teachings of Aklepi et al.; the resultant system/method continually optimizing the product order delivery route (Aklepi et al.: Abstract; Column 4, Lines 51-68; Column 9, Lines 1-23; Figures 1-2).

Regarding Claim 13 CEMEX does not expressly informing a customer of the transfer of the order from the supplier to the shipping and handling entity as claimed.

Aklepi et al. teach that informing (notifying, appraising, updating) customers of the progress and/or status of the delivery (order, shipment; e.g. the transfer of the order from the supplier to the shipping and handling entity) is well known (Column 2, Lines 66-68; Column 3, Lines 1-16) in an analogous art of product delivery management for the purposes of keeping customers informed regarding the status/progress of their order.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for ensuring the delivery of a product to a delivery destination within a predetermined delivery time period wherein the system/method utilizes alternate product suppliers and alternate order delivery destinations as taught by CEMEX would have benefited from notifying (informing) customers of the progress and/or status of their delivery in view of the teachings of Aklepi et al.; the resultant system/method enabling users to remain informed regarding the status/progress of their order. (Aklepi et al.: Column 2, Lines 66-68; Column 3, Lines 1-16).

Regarding Claims 14-15 CEMEX does not expressly teach entering the time of the transfer of the product from the supplier to the shipping handling entity in a business tracking or recording the time and names of the (shipping and handling) entities involved in each handover/exchange between the one or more shipping and handling entities as claimed.

Aklepi et al. teach recording a plurality of product order delivery information at each of the exchanges including time, date, next destination, entities, involved and the like (Column 5, Lines 5-66; Column 7, Lines 55-68; Column 8, Lines 44-65); Column 5, Lines 5-66; Column 7, Lines 55-68; Column 8, Lines 44-65) in an analogous art of product order delivery management for the purposes of continually re-optimizing the delivery schedule/route (optimal routing of the order/delivery through the delivery network/series of shipping and handling entities; Column 6, Lines 1-8).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method for ensuring the delivery of an order within a predetermined delivery window as taught by CEMEX would have benefited from recording the time and names of the (shipping and handling) entities involved in each handover/sexchanges between the one or more shipping and handling entities in view of the teachings of Aklepi et al.; the resultant system enabling the system/users to continually re-optimizing the delivery schedule/route at each of the plurality of handovers (handoffs, checkpoints, etc.) thereby ensuring an optimal route through the network of shipping and handling entities (Aklepi et al.: Column 6, Lines 1-8).

Regarding Claim 16 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination further comprises establishing a critical time during the delivery process (guaranteed delivery window) and determining at each shipping and handling exchange (hand-off, hand-over, transfer, etc.) whether the delivery process has passed a critical time (i.e. giving customers a 5% discount for product deliveries that missed the guaranteed window; reference B: Paragraphs 6-7, 9, Page 2; Paragraphs 6-7, 9 and Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

Regarding Claim 28-29 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination further comprising determining a delivery location for the initial product order to the customer and delivering the customer

Art Unit: 3623

order to the initial delivery destination (reference A: Paragraph 4, Page 1; reference B: Paragraphs 6-7, 9, Page 2; Paragraphs 6-7, 9 and Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

Regarding Claim 33 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination within a predetermined time period, the system/method utilizing an alternate product supplier and comprising:

- a communication interface for establishing a communication between a client desiring to ship a product and business entity that can ship the product, the communication interface enabling the client to submit purchase and shipping information to the business entity (reference A: Paragraphs 1, 7, Page 3; reference B: Paragraphs 5-6, Page 1; Paragraph 1, Page 2; reference C: Paragraphs 3, 7, Last Paragraph, Page 1);
- a program (code, software, subsystem, etc.) that process information received by the business entity from the client related to the purchase and shipment of the product (reference A: Paragraphs 1, 7, Page 3; reference B: Paragraphs 5-6, Page 1; Paragraph 9, page 2; reference C: Paragraphs 3,7, Page 1);
- a subsystem for tracking the shipped order along a delivery route to asses the progress of the shipment to the delivery destination (reference A: Paragraph 4, page 3; reference B: Paragraphs 6-7, Last Paragraph, Page 1; Paragraphs 6-7, 9, Page 2; reference C: Paragraphs 4-6, Page 2);

- a subsystem (switchover entity) for implementing an alternate delivery program (steps, rules, method, subsystem, etc.) wherein tracking subsystem indicates that the shipped order will not reach the delivery destination within the predetermined delivery time (reference B: Paragraphs 6-7, 9, Page 2; Paragraphs 6-7, 9 and Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2);

- an alternative delivery subsystem (component, code, module, object, class, etc.) determines a location of a second order that is substantially the same as the shipped order and generates a delivery route to deliver the original order to the determined location of the second order (reference A: "when the Cemex system receives changes in construction plans from a customer, the system can instantly identify orders of similar concrete formulas and reroute appropriate trucks to plug emerging gaps in order fulfillment. Also, the system can divert trucks to nearby plans and have their formulas modified, thus fulfilling orders with trucks originally intended for other destinations", Paragraph 6, Page 3; reference A: Paragraphs 1, 4, 6, Page 3; reference C: Paragraph 1, Page 1, Paragraphs 4-6, Page 2); and

- storing all of the product information related to the purchase, shipment and delivery of the client order (central clearinghouse, back-office systems, etc.; reference C: Paragraphs 4-6, Page 2).

While CEMEX teaches the utilization of well-known expert systems, artificial intelligence and complex computer systems, approaches and/or technologies CEMEX is silent on the specific architecture and/or subsystems utilized in the product delivery

Art Unit: 3623

system and method. Specifically CEMEX does not expressly teach recording information contained in the delivery order in a product delivery database as claimed.

Aklepi et al. teach storing/recording information a plurality of delivery information in a database (including delivery order information), in an analogous art of product/materials delivery management, for the purposes of providing a convenient and/or efficient mechanism for storing and accessing a plurality of data via the Internet (Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to store/record a plurality of delivery information, as taught by CEMEX would have benefited from recording/storing delivery information in a database in view of the teachings of Aklepi et al.; the resultant system enabling users to efficiently and/or conveniently store and/or access the plurality of delivery information stored by the system via the Internet (Aklepi et al.: Column 10, Lines 13-43).

Regarding Claim 34 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination wherein the order processing, switchover and storage components (modules, subsystems, software, devices, etc.) are contained in a server (computer, device, system) at one location (expert system, artificial intelligence software, communication/computer network, operations center,

back-office systems, etc.; reference A: Paragraphs 6,9, Page 3; reference B: Paragraph 7, Page 2; reference C: Last Paragraph, Page 1; Paragraphs 4-5, Page 2).

It is noted that the location of the one or more system components (subsystems, modules, code, programs, hardware, etc.) merely represent non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific "location" of the one or more system components/subsystems. Further, the structural elements remain the same regardless of the specific "location" of the one or more system components/subsystems. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.

Regarding Claim 35 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination wherein the system communicates over a communication network (e.g. Internet, satellite communications, information network, distributed computing, etc.; reference C: Last Paragraph, Page 1; Paragraphs 4-6, Page 2).

Regarding Claim 36 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination further comprising a decision-making

Art Unit: 3623

component (subsystem, code, routine, module, expert system, AI, etc.; reference A: Paragraph 4, Page 3; reference B: Paragraph 3, Page 1; Paragraph 1, Page 2) that determines whether to implement the alternative delivery program (process, method, series of steps, etc.) based on shipment tracking information (reference A: Paragraphs 4, 6, Page 3; reference B: Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

Regarding Claim 37 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination wherein the decision-making component further comprises switchover business logic (rules, policies, business logic, expert system, artificial intelligence software, etc.) which perform the implementation of alternative delivery programs (reference A: Paragraphs 4, 6, Page 3; reference B: Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

Regarding Claims 38-39 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination wherein the system further comprises suppliers (mixing plants, trucks) and shipping and handling information as discussed above.

CEMEX does not expressly teach utilizing databases or subsequently that the supplier and shipping and handling databases are in different locations as claimed.

Aklepi et al. teach storing/recording information a plurality of delivery information a database (including delivery order information), in an analogous art of product/materials delivery management, for the purposes of providing a convenient and/or efficient mechanism for storing and accessing a plurality of data via the Internet (Column 4, Lines 50-68; Column 6, Lines 17-24; Column 7, Lines 10-35; Figure 1, Element 102).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method, with its ability to store/record a plurality of delivery information, as taught by CEMEX would have benefited from recording/storing delivery information in a database in view of the teachings of Aklepi et al.; the resultant system enabling users to efficiently and/or conveniently store and/or access the plurality of delivery information stored by the system via the Internet (Aklepi et al.: Column 10, Lines 13-43).

While CEMEX is silent on the specific location of the one or more system components (subsystems, modules, code, programs, hardware, databases, etc.) these differences are only found in the non-functional descriptive and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific "location" of the one or more system components/subsystems. Further, the structural elements remain the same regardless of the specific "location" of the one or more system components/subsystems. Thus, this descriptive material will not distinguish the claimed

Art Unit: 3623

invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.

Regarding Claim 40 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination further comprising multiple systems/subsystems (components, modules, programs, etc.), in different locations (centralized clearinghouse, terminals in trucks, etc.), in communication with one another and containing the product delivery subsystems (processing, tracking, switchover, database).

CEMEX is silent on the specific location of the one or more system components (subsystems, modules, code, programs, hardware, databases, etc.) used to provide the system/method for ensuring the delivery of products these differences are only found in the non-functional descriptive material non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific number of systems/methods used to provide the system/method for ensuring the delivery of products. Further, the structural elements remain the same regardless of the specific number of systems/methods used to provide the system/method for ensuring the delivery of products. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d

Art Unit: 3623

1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.

8. Claims 5, 17-18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over CEMEX's Delivery Management System and Method as evidenced by at least the following:

- I. Meyer, Christopher, Role Models (1996), herein after reference A;
- II. Petziner, Thomas et al., The front lines (1996), herein after reference B; and
- III. Slywotzky, Andrew, Concrete Solution (2000), herein after reference C;

in view of of Aklepi et al., U.S. Patent No. 6,795,823 as applied to claims 1-4, 12-16, 23-25, 27-29, 31 and 33-40 above and further in view of Bush, Ronald Roscoe, U.S. Patent No. 5,835,377.

Regarding Claims 5 and 26 CEMEX teaches a method and system for ensuring the delivery of a product to a delivery destination wherein tracking further comprises monitoring the shipped order to determine the progress of the delivery (5% discount for late deliveries/orders, guaranteed delivery window; reference A: Paragraph 4, Page 3; reference B: Paragraphs 6-7, Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2).

CEMEX does not expressly teach utilizing checkpoints, calculating a revised delivery time based on the progress of the delivery as claimed.

Aklepi et al. teach re-calculating (determining, estimating, etc.) at each checkpoint (exchange, intermediate processing station, etc.) a revised delivery time based on the delivery's progress thereby providing real-time and/or near-real-time tracking information, in an analogous art of delivery management, for the purposes of optimizing the delivery (route, schedule, etc.) to ensure the delivery of the shipment/product at a predetermined time and location (Column 4, Lines 51-60; Column 9, Lines 1-23).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method as taught by CEMEX would have benefited from calculating a revised (updated) delivery time (estimated time of arrival) in view of the teachings of Aklepi et al.; the resultant system enabling the system to provide the most accurate tracking information possible and/or ensure the on-time delivery of the shipment by continually optimizing the delivery route (schedule, itinerary; Aklepi et al.: Column 1, Lines 65-68; Column 9, Lines 19-23).

Neither CEMEX nor Aklepi et al. expressly teach determining whether a predetermined product delivery time can be *achieved* based on the calculated and revised delivery time as claimed.

Art Unit: 3623

Bush teaches determining whether a predetermined product delivery time can be achieved based on the calculated and revised delivery time (Column 5, Lines 45-68; Column 6, Lines 1-26; Figure 4) in an analogous art of product order delivery management for the purposes of getting the order back on schedule (on track, delivered on time, etc.) by implementing an alternative supplier/source and/or shipping route if the scheduled delivery time can not be achieved (Column 6, Lines 1-26).

More generally Bush teaches a method and system for ensuring the delivery of a product (materials, parts, goods, etc.) to a delivery destination (manufacturing facility) within a predetermined time period ("just in time") comprising (Column 1, Lines 58-68; Column 2, Lines 45-61; Column 3, Lines 4-15):

- receiving (collecting, providing, etc.) a delivery order (request, purchase order, shipping order, etc.) from a customer (user, client, manufacturing facility, etc.) containing product (parts, materials, etc.) and delivery (time and location) information (Column 5, Lines 49-47; Figure 4);

- processing (reviewing, acting upon, implementing a series of steps, etc.) the delivery order (Column 3, Lines 4-15 and 40-47; Figure 4);

- shipping the order to the delivery location (Column 3, Lines 50-57; Figure 4);

- tracking the shipped order along a delivery route (itinerary, schedule, etc.) to assess the progress (status) of the shipment/delivery (Column 5, Lines 51-68; Column 6, Lines 1-34; Column 7, Lines 1-3; Figure 2, Element 20; Figure 4);

- implementing an alternative delivery program (method, step, process, policy, rule, etc.), if the order tracking indicates that the shipment will not reach the delivery

Art Unit: 3623

destination within the predetermined time (early, late, delayed, etc.; Column 3, Lines 4-15; Column 5, Lines 51-68; Column 6, Lines 1-34; Figure 4, Elements 48, 50, 52 and 54) wherein implementing an alternative delivery program/process comprises:

- contacting (communication, calling, etc.) an alternative supplier (product supplier, shipping order, purchase order, etc.; Column 6, Lines 5-27; Figure 4);
- providing the alternative supplier with the delivery order information (product, location, shipping order, purchase order, etc.; Column 6, Lines 5-27; Figure 4);;
- determining a delivery route (itinerary) for the product/order, the delivery route containing checkpoints (periodic time checks/queries) for tracking the product during delivery (Column 3, Lines 4-15; Column 5, Lines 33-38; Column 6, Lines 65-68; Column 7, Lines 1-3) wherein the delivery route checkpoints are at least one of geographic points along the delivery route or time checkpoints at designated times during the delivery (Column 3, Lines 4-15; Column 5, Lines 33-38; Column 6, Lines 65-68; Column 7, Lines 1-3; Figure 4, Element 46);
- monitoring the delivery route (itinerary) checkpoints to determine the progress of the delivery (Column 3, Lines 4-15; Column 5, Lines 33-38; Column 6, Lines 65-68; Column 7, Lines 1-3; Figure 4, Elements 46 and 48);
- accommodating and notifying (altering) the customer, manufacturing processes or other processes/systems of the delayed shipment and/or alternative source/supplier (Column 6, Lines 1-49; Figure 4);
- shipping the product from the alternative supplier to the delivery destination (Column 3, Lines 4-15; Column 6, Lines 5-27; Figure 4);

Art Unit: 3623

- recording (tracking, storing, collecting, etc.) the delivery order information in the system (file, memory, system, etc.; "stored itinerary", Abstract; "loaded into the computer system", Column 3, Lines 4-15; Figure 4, Elements 42 and 44);
- scheduling the order with a supplier (product, itinerary, shipping order, purchase order, etc.; Column 1, Lines 42-57; Column 6, Lines 5-27; Figure 4); and
- selecting a shipping and handling entity (transportation mode, shipping route/source) to ship the product (logistics provider, carrier, shipper, etc.; Column 1, Lines 42-57; Column 6, Lines 5-27; Figure 4).

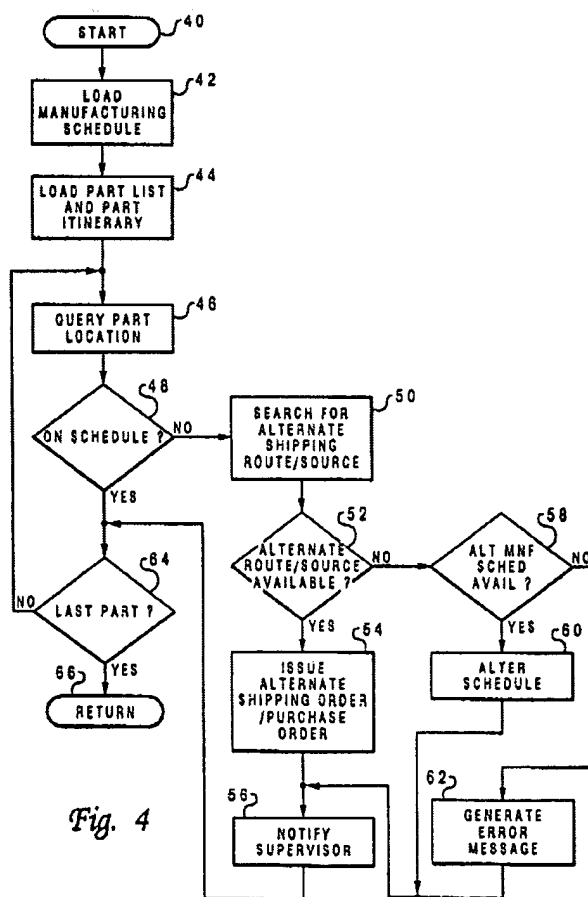


Fig. 4

It would have been obvious that the system and method for ensuring and tracking the delivery of an product to a predetermined destination within a predetermined delivery time as taught by the combination of CEMEX and Aklepi et al. would have benefited from determining whether a predetermined product delivery time can be achieved based on the calculated and revised delivery time in view of the teachings of Bush; the resultant system/method taking corrective actions to "get the order back on track" by implementing an alternative supplier/source and/or shipping route if the scheduled delivery time can not be achieved (Bush: Column 6, Lines 1-26).

Regarding Claim 17 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination further comprising determining whether a delivery will reach the designated delivery destination in the predetermined delivery time as discussed above.

CEMEX does not expressly teach determining whether a delivery will reach the designated delivery destination in the predetermined delivery time based on the location and time of a *particular exchange* as claimed.

Aklepi et al. teach re-calculating (determining, estimating, etc.) at each checkpoint (exchange, intermediate processing station, etc.) a revised delivery time based on the delivery's progress thereby providing real-time and/or near-real-time tracking information, in an analogous art of delivery management, for the purposes of

Art Unit: 3623

optimizing the delivery (route, schedule, etc.) to ensure the delivery of the shipment/product at a predetermined time and location (Column 4, Lines 51-60; Column 9, Lines 1-23).

It would have been obvious to one skilled in the art at the time of the invention that the delivery system and method as taught by CEMEX would have benefited from calculating a revised (updated) delivery time (estimated time of arrival) in view of the teachings of Aklepi et al.; the resultant system enabling the system to provide the most accurate tracking information possible and/or ensure the on-time delivery of the shipment by continually optimizing the delivery route (schedule, itinerary; Aklepi et al.: Column 1, Lines 65-68; Column 9, Lines 19-23).

Neither CEMEX nor Aklepi et al. expressly teach determining whether a delivery will reach the designated delivery destination in the predetermined delivery time based on the location and time of a *particular exchange* as claimed.

Bush teaches determining whether a predetermined product delivery time can be achieved based on the calculated and revised delivery time (Column 5, Lines 45-68; Column 6, Lines 1-26; Figure 4) in an analogous art of product order delivery management for the purposes of getting the order back on schedule (on track, delivered on time, etc.) by implementing an alternative supplier/source and/or shipping route if the scheduled delivery time can not be achieved (Column 6, Lines 1-26).

It would have been obvious that the system and method for ensuring and tracking the delivery of an product to a predetermined destination within a predetermined delivery time as taught by the combination of CEMEX and Aklepi et al. would have benefited from determining whether a predetermined product delivery time can be achieved based on the calculated and revised delivery time in view of the teachings of Bush; the resultant system/method taking corrective actions to "get the order back on track" by implementing an alternative supplier/source and/or shipping route if the scheduled delivery time can not be achieved (Bush: Column 6, Lines 1-26).

Regarding Claim 18 CEMEX teaches a system and method for ensuring the delivery of a product to a designated destination wherein determining that a product (order) will reach a designated destination further comprises:

- determining whether the product has reached a predetermined destination (missed window, give customer 5% discount or not; reference B: Paragraphs 6-7, 9, Page 2; Paragraphs 6-7, 9 and Last Paragraph, Page 1; reference C: Paragraphs 4-6, Page 2); and
- delivering the product when the product (order) reaches the predetermined destination (reference A: Paragraph 4, Page 1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Klein, Eric, U.S. Patent No. 5,541,845, teaches a system and method for ensuring and tracking the delivery of a product to a delivery destination within a predetermined period of time wherein a shipped order's progress is assessed based on it passing through a plurality of checkpoints.

- Foladare et al., U.S. Patent No. 5,831,860, teach a system and method for ensuring and tracking the delivery of a product to a delivery destination wherein the system/method utilizes alternate delivery locations that allows for the dynamic re-routing

Art Unit: 3623

of shipped orders as well as provides users to to determine an optimal delivery location/destination based on plurality of information such as the current location of the order (package), the latest acceptable delivery time, location and availability of shipping and handling entity (delivery personnel).

- McDonald et al., U.S. Patent No. 6,496,775, teach a system and method for ensuring and tracking the delivery of a product to a delivery destination wherein the system tracks the location and delivery status of a plurality of shipping and handling entities.

- Coffee et al., U.S. Patent No. 6,611,755, teach a system and method for ensuring and tracking the delivery of a product to a delivery destination wherein the shipped order's progresses is assessed by on a plurality of tracked/monitored checkpoints.

- Jones, Kelly, U.S. Patent No. 6,859,722, teaches a system and method for ensuring and tracking the delivery of a product to a delivery destination wherein the system/method notifies users of the monitored/tracked delivery status before, during or after the delivery has been made.

- Demsky et al., U.S. Patent No. 6,868,393, teach a system and method for receiving, processing and delivering one or more customer orders wherein suppliers may swap/transfer orders and/or products upon the cancellation of an initial customer order and the placement of a substantially similar second customer order.

- Smith et al., U.S. Patent No. 6,879,962, teaches a system and method for ensuring and tracking the delivery of a product to a delivery destination comprising

Art Unit: 3623

route/delivery status/tracking, checkpoints, multiple ship/order stages, multiple shipping and handling entities, multiple potential delivery routes as well as event notification.

- Tobin et al., U.S. Patent No. 2003/0037009, teach a system and method for ensuring and tracking the delivery of a product to a delivery destination, the system/method utilizing alternative delivery destinations/locations based on user redirection requests.

- Choi, Lawrence et al., WO 01/52163, teach a system and method for ensuring and tracking the delivery of a product to a delivery destination comprising receiving and processing product delivery orders multiple shipping and handling entities, storing a plurality of order/product delivery information in one or more databases and tracking/monitoring the status/progress of shipped orders.

- F.Y.I. Fight chaos with chaos (1996) teach an expert system and method for ensuring and tracking the delivery of a product to a delivery destination.

- Tricks, Henry, Deliveries in pizza-style (1998) teaches a "complex computer system" for ensuring the delivery of a product to a predetermined delivery location wherein the system/method utilizes alternate delivery locations for delivering an order initially ordered by a first customer to a second/alternate delivery location of a substantially similar order to a second customer.

- Brews, Peter, Survey – Mastering Management (2000) teaches an Internet based system and method for ensuring the delivery of a product to a delivery destination within a predetermined time period.

- Supply Chain Management (2001) teaches the wide spread use of supply chain systems/method/technologies as well as several key benefits/features of such systems including but not limited to: sourcing of raw materials, assured delivery schedules, processing customer orders, inventory management, logistics, shipment notification and product/order delivery. The article further teaches CEMEX partnership with i2 Technologies to further develop and deploy CEMEX's supply chain systems/methods.

- CEMEX.com Web Pages (2000) teaches based system and method for ensuring the delivery of a product to a delivery destination within a predetermined time period (net-based truck dispatch system/method).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

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SJ

3/1/2006


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